FOREIGN AGRICULTURE

January 1962

Payday in Korea

The Strategy of Food Aid

Trend Toward Freer Trade

Finland Today

UNITED STATES DEPARTMENT OF AGRICULTURE · FOREIGN AGRICULTURAL SERVICE

To report and interpret world agricultural developments

FOREIGN AGRICULTURE

Vol. XXVI • No. 1

January 1962

Quarter Century

This month marks the 25th anniversary of *Foreign Agriculture*. In the quarter century that this magazine has been reporting and interpreting world agricultural developments, many things have happened but few so important to the American farmer as the phenomenal rise in our foreign trade in agricultural products.

In 1936, when *Foreign Agriculture* was born, the dollar value of this trade was 748 million, and we thought we were doing very well; 25 years later, the annual value of U.S. farm products shipped abroad added up to $4.9 billion.

Quantity figures are equally staggering. The 4 million bushels of wheat and flour that we were selling in foreign markets in 1936 have skyrocketed to 661 million bushels during the quarter century. Our foreign vegetable oil trade has gone from 8 million pounds to 1.2 billion, poultry from 2 million pounds to 204 million, and tallow from 14 million pounds to 1.7 billion. And these are just a few of the amazing comparisons that could be made.

This vast volume of trade reflects in part natural growth and improved economic conditions around the world. Much of it, though, is the result of our national policies and programs.

Recent years have witnessed closer cooperation between government and industry. Together they have developed markets for our farm products where none existed before. (Tallow and poultry are two good examples.) Our dollar exports of farm products are at record levels.

Also, we are sharing our abundance with the less developed countries of the world, selling them the foodstuffs they need, payable in their own currencies. In the last 7 years, about a third of our agricultural exports have moved under these government-financed programs.

And we have come to realize that agricultural trade needs continuing servicing. Our agricultural attachés help do the job abroad. But at home it is just as important for the people who make a living from growing and exporting farm goods to be kept informed—and this, we believe, is where *Foreign Agriculture* performs a service. It is the only U.S. magazine devoted exclusively to the world's agricultural trade.

Cover Photograph

On payday this Korean worker on a National Reconstruction Service program gets about half his pay in cash and the remainder in grain and raw cotton sheeting supplied through U.S. Government-financed aid programs. He is working on a badly needed flood control dike.

Contents

3 The Strategy of Food Aid

5 A 7-Week Look at Africa's Livestock

8 Fish Flour Rates High in Protein but Faces Fight for Consumer Acceptance

9 The Trend Toward Freer Trade

10 United States, Top Cigarette Exporter, Gains a Greater Share of World Trade

11 The FAO Conference—A World Agricultural Forum

12 Markets Old and New in Nigeria

14 Finland Today

17 Grapes in the Soviet Union

18 Portugal Plans To Irrigate More Land

20 Puree—Portugal's New Industry

21 Thailand's Expanding Kenaf Crop Supplies Cash for Farmers and Fiber for Factories

22 Indian Women Taught New Ways To Use Wheat

23 Trading Post

Editor:
Alice Fray Nelson

Associate Editor:
Ruth A. Oviatt

Advisory Board:
W. A. Minor, Chairman; Wilhelm Anderson, F. L. Erhardt, Kenneth W. Olson, Paul E. Quintus, Gerald E. Tichenor

Foreign Agriculture is published monthly by the Foreign Agricultural Service, U. S. Dept. of Agriculture, Washington 25, D. C. Use of funds for printing this publication has been approved by the Director of the Bureau of the Budget (Sept. 4, 1959). Yearly subscription rate is $1.75, domestic, $2.50, foreign; single copies are 15 cents. Orders should be sent to Superintendent of Documents, Government Printing Office, Washington 25, D. C.

The Strategy of Food Aid

We must stop thinking of food aid to underdeveloped countries as a solution to our surplus problem and begin thinking of it as a way of building future markets.

By SHERMAN E. JOHNSON
Deputy Administrator, Foreign Economics
Economic Research Service

The U.S. agencies concerned are taking a new look at our foreign aid programs. We seem to have learned that aid granted on a year-to-year basis for isolated projects has not been very effective in helping the receiving countries to achieve self-sustaining economies. We now recognize that effective aid must be fitted into a plan for economic development which, if carried out over a period of years, will enable the receiving country to increase production and income sufficiently to balance its imports with exports of goods and services.

Does food aid fit into an integrated program of assistance to achieve national economic development? I believe it does, because a food shortage can be an effective barrier to economic growth.

Suppose a densely populated and underdeveloped country decides to make a large investment in new industrial plants, and at the same time improve its system of transportation and communications. The construction phase of such development creates additional employment and increased purchasing power of workers. A high percentage of the increased income of workers will be spent for food, and if larger food supplies are not available, the rising prices of food will generate an inflationary spiral that will retard economic development.

India experienced such a sequence of events in 1958-59. Apparently, somewhat similar situations have developed in Iran and Indonesia.

More food can be obtained either from increased domestic production or from imports. But domestic production is not likely to respond fast enough to meet the need, and commercial imports are limited because of the scarcity of foreign exchange. The available foreign exchange is needed to import equipment for plant construction. Under such conditions food aid has a unique place in an integrated program to accelerate economic growth. Title I, P.L. 480 programs can meet this need.

Reasons for Concern

Why are we interested in the economic development of these countries?

I would say, first of all, because we are a part of the Free World community. With the present means of rapid transportation and communication, the Free World is necessarily interdependent. And it is my personal belief that the Free World, as we know it, cannot endure permanently with three-fifths of the world hungry and two-fifths well fed, even overfed. Freedom from hunger is a prerequisite to enjoyment of other freedoms.

With radio programs coming into remote villages and with jet airplanes in the sky, the hungry people of the world know that other people live better than they do. They are being told every day that they too can achieve abundance if they will only follow the Communist methods of development. This promise appeals to people who at present have no opportunity of bettering their conditions. Food aid can provide some immediate improvement if the governments of receiving countries are willing and able to use it for this purpose. But more important, it can help build a foundation for permanent improvement of income and welfare.

The second reason for our interest in economic development is our concern for the long-term welfare of American farmers. It is now clearly evident that with average weather our food production capacity will exceed our prospective domestic and foreign commercial markets for many years to come. We are, therefore, interested in future markets for farm products.

If food and fiber can effectively contribute to economic development that will result in building self-sustaining economies in the presently underdeveloped nations, total trade will increase. Eventually, this is likely to result in larger commercial markets for our farm products.

Past Experience

Is this a realizable goal or an idle dream? Perhaps we can get some clues as to potentialities by examining the trends in Italy and Japan. These two countries received considerable foreign aid for rehabilitation and economic development, especially in the early postwar years. Both countries, of course, had made considerable progress in economic development before World War II. But they suffered serious wartime devastation and had to face the difficult task of recovery to prewar levels of production.

In Italy, both exports and imports of all products more than doubled from 1953 to 1960. The value of imports of agricultural products in 1959 was 20 percent above 1953, despite declining prices. Domestic production of farm products increased about 20 percent in the same period. In fiscal year 1955-56, about 75 percent of U.S. exports of agricultural products to Italy were government-financed food and fiber; in 1959-60, only 23 percent.

In Japan, total exports tripled in volume from 1953 to 1960, and imports nearly doubled. The value of imports of agricultural products increased 23 percent from 1953 to 1960. Domestic production of farm products increased 44 percent in the same period. In fiscal year 1955-56, about 33 percent of U.S. exports of agricultural products to Japan were government-financed; in 1959-60, only 4 percent.

These figures strongly support the thesis that if economic growth can be accelerated, foreign trade will expand, and

imports of farm products will increase along with expansion of domestic production. Under such conditions, the U.S. Government-financed food and fiber exports can be gradually converted to commercial exports. This transition, however, assumes our acceptance of other goods in exchange.

Changed Attitudes

If we take this approach to food aid, it will involve a basic shift in public understanding of the reasons for P.L. 480-type food and fiber programs—a shift from regarding them as temporary surplus disposal operations to thinking of them as "food for economic development" in the broad setting of helping underdeveloped countries to achieve self-sustaining economies.

The receiving countries also will need to change their attitudes toward food aid. In some countries, there is an inclination to regard acceptance of food aid as a favor to the United States. We have promoted this attitude by continuously harping on our surplus problem. True, our production capacity in agriculture is much greater than our immediate prospects for commercial markets. But we are using U.S. labor, land, and capital resources to provide food aid. These resources are not costless.

From a strictly domestic standpoint, it might be more desirable to place more of our land resources in a contingency reserve than to use them for current food production. Nevertheless, I regard food for economic development as a gamble well worth taking in the interest of long-term commercial markets for American agriculture.

For this reason, then, as well as for promotion of world peace and progress, we should be willing to use our food and fiber along with other resources to help underdeveloped countries that are willing to plan and to carry out integrated programs to achieve self-sustaining economies. But we cannot and should not attempt to use food and other government aid to help nations whose government authorities are not willing to develop programs that will enable their own people to increase their output and incomes, and to build educational, political, and economic institutions for participation in the Free World community.

Long-Term Planning

Effective use of food as an integral part of economic and institutional development involves more than simple acceptance of food aid to supplement commercial imports in order to save foreign exchange. Additional food should be distributed in the areas of greatest need and where it will maximize economic growth and welfare. Specific provisions will need to be made for receiving, storing, transporting, and distributing food aid. Present facilities usually are inadequate, and new construction will be required.

In the United States, a program of food for economic development involves commitments for 5 to 10 years, depending upon conditions in each country where aid is extended. This will mean budgeting for assured supplies from current production when excess stocks are liquidated. Food aid then will be included as a part of the prospective outlet for farm products in our projections for the years ahead.

We should consider food aid as a means of breaking the food barrier to economic progress. This requires a broad approach to food needs. Relief feeding in an emergency is certainly a prerequisite to economic development, but prevention of acute hunger is not enough. Workers must have sufficient food for sustained effort on development projects. And food enough can prevent debilitating diseases that greatly reduce worker productivity.

If children are adequately fed and provided with educational facilities, they can receive training in technical and management skills that will provide an intelligent work force for future development. We tend to forget how soon the children now in school can become a part of the trained corps of workers so badly needed to man the new enterprises. Therefore, in a food-for-development program, I would include emergency feeding, school lunches, food for public works programs in both rural and urban areas, and food necessary for resettlement of population from overcrowded areas.

Technical Aid, Too

Because of the rapid growth of population, from 2.5 to 3 percent a year in most underdeveloped countries, even herculean efforts at increasing domestic food production are not likely to achieve self-sufficiency in many countries. Domestic expansion of food production may provide maintenance of present levels of consumption for the growing population, but increased food demands resulting from economic development will have to be met in other ways.

Consequently, we should not fear a conflict between extending technical and other aid to increase food production in the receiving countries, and our future markets for farm products. In fact, we should provide technical and other aids to help farmers in these countries improve their technology in order to increase their production and incomes. The experience in Italy and Japan indicates that if other resources are available, including a trained labor force, economic growth can provide markets for increased domestic production as well as for larger imports of farm products.

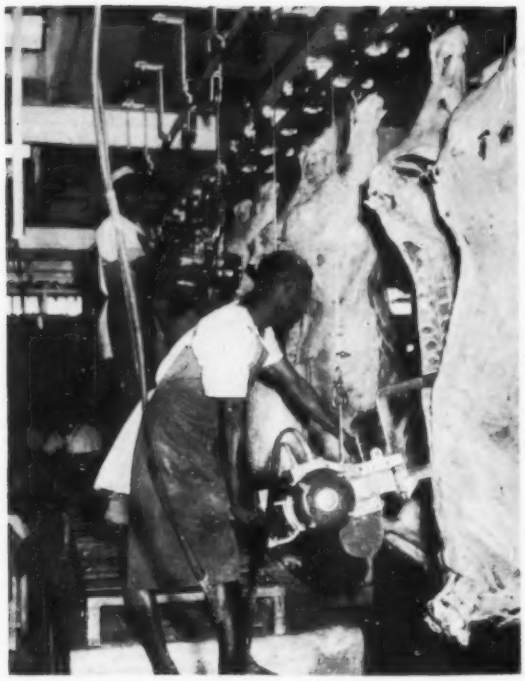
We also need to overcome the objection that food aid only adds to the surplus population in underdeveloped countries. Retardation of population growth is urgently needed in most of these countries, but semistarvation is not an effective method of limiting increases in population. And no freedom-loving country can permit its people to starve for want of food. Therefore, the population aspects of economic development involve programs different from those designed to provide more adequate food supplies.

Twenty Million Acres

Finally, how does food aid relate to our farm outlook?

Our present food aid programs are providing outlets for the output from 20 million average acres of harvested cropland. If we attempted to dispose of these products on the commercial markets, prices would be demoralized. The other alternative, of course, is to not produce them. This would mean bigger and better supply control programs, or shrinkage of output by chronic low prices for agricultural products and the resulting bankruptcy of many farmers.

(Continued on page 22)



Left, a government meat processing plant, Mombasa, Kenya
Below, Holstein-Zebu hybrids are milked at a Uganda school.

A 7-Week Look at Africa's Livestock

James P. Hartman of FAS's Livestock and Meats Division reports on the trip he took last August and September to examine the livestock industries of 20 African countries and evaluate the potentialities for U.S. trade on that continent.

The strongest impression left by a 7-week study of Africa's livestock industry is of a vast land mass with tremendous variations in climate, soil, elevation, rainfall, resources, and culture; in short, a continent about which it is difficult to generalize.

Africa, on the whole, seems to have enough livestock to provide a more than adequate supply of meat and animal byproducts. Still, actual output of livestock products is low.

Probably less than 5 percent of the continent's cattle is slaughtered each year. In Kenya, Rhodesia, and the Republic of South Africa, as much as 15 to 18 percent of the national herd may be slaughtered each year but, in Ethiopia and some of the other countries, the figure may fall as low as 1 percent.

Problems and Programs

In many areas, cattle represent liquid capital. A farmer will sell or barter an animal only when in dire need of some article. Meat slaughter and consumption tend to be reserved for feasts and special celebrations.

The difficulties imposed by tradition are minor when compared with the practical problems facing African stockmen. Almost every known disease and parasite occurs in Africa. Rinderpest, contagious bovine pleuropneumonia, and foot-and-mouth disease take heavy tolls and tsetse fly restricts animal numbers in many areas. Most of the fevers caused by ticks, such as redwater, hardwater, and coast, bring on death or severe weight losses. Still greater economic loss results from internal and external parasites. Migrating game animals aggravate the control problem.

Limited feed and low-quality nutrition are other problems. Wide areas have a long dry season during which grass becomes scarce and nutritionally deficient. Except for Rhodesia, no country has a feedlot fattening program and the general level of management is low.

South Africa, Kenya, and Rhodesia, however, do have active and effectice livestock development programs. Working together in the programs are the meat boards, agriculture departments, veterinarians, animal husbandry technicians, and cattle breeders.

In the other African countries, little is being done in the way of organized breeding, management, or feeding programs. A few government research or experimental farms have undertaken small projects in breeding, selection, pasture, and water development. A few private cattle breeders too are doing a fine job, but they are in the minority. Most countries have veterinary officers working on control or eradication programs, especially for rinderpest, and some are also building or improving slaughter plants and meat processing factories.

In addition to cattle, there are millions of sheep and goats raised for meat, skins, and wool. South Africa has one of the world's outstanding

Cattle are branded after their sale at a Kenya auction. Kenya's is one of Africa's most modern stock industries.

A shepherd tends his flock of native sheep, Kenya. Sheep and goats are raised for their meat, skins, and wool.

sheep raising and wool industries.

There are also some swine but they are of relatively minor importance. Throughout the continent the growth of a swine industry is hindered by the absence of a feed industry, a shortage of feed grains, and unfavorable price policies on feed grains as well as a general lack of interest on the part of Africans. In the north and west the influence of the Moslem religion, which forbids pork consumption, has held swine numbers down still further. The only countries where swine raising is of any significance are South Africa, Kenya, Rhodesia, and Nigeria. There are a few indigenous breeds but large white English pigs are more popular.

Camels, horses, and, in some places, buffalo are raised for draft and transportation purposes as well as meat.

Meat Consumption

Meat is an important and popular part of the Africans' diet. However, limited availability, minimal storage facilities, high prices relative to other basic foods, and the restricted purchasing power of many of the people keep per capita meat consumption at a very low level.

This low intake of animal protein in the African diet is a real health problem, especially in the rain forest areas. Some countries import meat and meat products to fill the gap but these imports are generally limited to the military forces and the high-income groups, because high duties, "dash" costs, and profit margins force retail prices into the luxury brackets.

In spite of all this, meat consumption is increasing. As gradual improvements in wages and employment occur, people will have more to spend for their food. Slaughter plants, cold storage facilities, processing plants, and retail outlets are expanding, and depletion of game animals is upping livestock production and market purchases.

Utilization of animal byproducts is limited. With the exception of South Africa, Kenya, and Rhodesia, feed manufacturing and chemical industries are nearly nonexistent and animal proteins and tallow tend to go to waste.

Trade Potentials

There are a number of small tanneries and several leather and shoe manufacturers. Use of leather products is increasing—but not as rapidly as it might because, in general, plastic sandals are preferred to leather shoes.

Soap consumption, on the other hand, is fast increasing and manufacturers will require more and more tallow. However, some countries restrict tallow imports, encouraging the use of palm and coconut oils in soap.

Despite the low level of domestic production, Africa imports little in the way of livestock and livestock products and even does some exporting. Current imports are of breeding stock (primarily Brahmans, Santa Gertrudis, and some British breeds), tallow, meat, processed meat products, and casings. Exports are hides and skins, wool, carcass meat, and variety meats. Kenya, Rhodesia, Chad, Niger, Guinea, Mauritania, Upper Volta, Somalia, and South Africa currently export either meat or slaughter animals.

Trade is primarily within Africa but some meat is supplied to ship's stores and the Red Sea countries. Kenya and Rhodesia have developed a good outlet for their best quality meats through the Smithfield market in London.

Many countries in Africa could use some good-quality beef, dairy, and swine breeding stock to improve existing breeds and establish new ones. The native cattle are hardy, resistant, and tolerant to certain ticks and diseases—even, in some cases, to tsetse fly—but they mature very slowly and the annual calf crop is small. Although the need is great, sales, at least in the near future, will be limited to a few government farms and a small number of private producers.

Probably there will be some increase in the demand for inedible tallow as feed industries are established. And, as mentioned before, another large tallow market is the rapidly growing soap

industry. There is also a potential market for canned meats, sausages, and luncheon meats as well as components for domestic production of these same commodities.

At present, most livestock purchases are from France, the United Kingdom, and Switzerland, the home countries of the large European trading companies that carry on most of the private importing and distribution in Africa. These established importers have been very loyal to European commodities and to their own countries' flagships.

European exporters are at a further advantage because African governments have been reluctant to authorize import licenses or dollar exchange for U.S. commodities. Some countries, particularly the French-speaking ones, impose import duties five to eight times higher on goods from dollar areas to increase trade from the franc area.

U.S.—African Trade

All the same, the United States is a very good customer for many of the products Africa has to sell and U.S.-African trade will probably increase despite severe trade barriers.

Most American imports from Africa are minerals and such agricultural products as coffee, cocoa, sisal, timber, and pyrethrum. In the way of livestock products, U.S. purchases are primarily of carpet wool, some merino wool, hides, and, especially, skins.

Currently, the most important livestock product on the list of U.S. exports to Africa is tallow. There is also a large amount of poultry meat sold in some areas of Africa. Santa Gertrudis cattle have been introduced in Kenya and two or three other countries, and a small amount of breeding stock is sold. Most American sales are to Egypt, Morocco, Liberia, Ghana, Nigeria, Kenya, South Africa, and Rhodesia.

Even counting the tallow, poultry, and breeding stock, American products play a relatively small part in Africa's livestock trade. Currency problems and the position enjoyed by the European trading companies have kept out some U.S. goods. However, this poor showing has also been due in part to lack of interest on the part of U.S. shippers unwilling to make the extra effort needed to reach the large and expanding African market.

Above, hides are dried in a curing yard, Tripoli, Libya. Cured hides and skins are among Libya's most vital exports. Right, Sambura tribesman prepares beef for drying at a plant in northern Kenya.

An Ankole cow—a native breed—is examined for ticks. African cattle are prey to almost all known diseases, many carried by ticks.

Fish Flour Rates High in Protein Value But Faces Fight for Consumer Acceptance

Fish flour—or fish protein concentrate, as some prefer to call it—is attracting increased international interest.

Basically, fish flour is a food additive which many believe to be the world's cheapest, most abundant, and biologically richest source of animal protein. Consisting of finely ground "whole" fish—odorless, tasteless, and undetectable, if so desired—the flour contains up to 95 percent of animal protein. These proteins have all of the 10 amino acids essential for the development of bone and muscle and for the daily maintenance and repair of bodily tissues. The flour has little, or none, of the carbohydrates and starches found in grain flour. It can be easily stored and transported, and does not need the refrigeration so seldom found in underdeveloped countries.

Principal proponents of the flour fall into two general categories: International organizations intent upon relieving crucial food deficiencies among an estimated 500 million people—primarily children and pregnant women; and international fishing and fish-processing interests which see in fish flour a profitable way to utilize sizes and species of fish heretofore deemed worthless.

Opponents to fish flour—in the United States, at least—are the baking industry, and various food processors and wheat grower groups. These argue that public acceptance of their products is based on their "purity." These products would be adulterated, they maintain, by incorporating "whole" fish flour which includes fish bones, eyes, and viscera, items not usually considered edible by most people. The fishing industry counters this objection by pointing to public enjoyment of oysters, sardines, clams, and other seafood frequently eaten whole.

Fish flour—or fishmeal for human consumption—was first marketed commercially by a Norwegian professor in 1890. South Africa began extensive research on fish flour in 1937, Iceland in 1938. Sweden opened a commercial plant in 1959 and plans to open others outside Sweden in the future. A number of American firms are now experimenting with the product.

Under the aegis of various United Nations organizations—FAO, UNICEF, and WHO, primarily—30 preliminary and 20 large-scale acceptability trials have been made in various countries in Latin America, Africa and the Middle East, and in the Philippines. Deodorized flour was tried in many of these; flours with varying degrees of taste and smell were tried in others.

Consumer preference varies from country to country. It has never been deemed likely, for instance, that the U.S. public could ever be won over by anything but the odorless, tasteless, undetectable variety. The Burmese, however, prefer the flour to taste of its finny antecedents, and be coarsely ground with particles resembling the small dried prawns popular in Burma as a garnish, and cooked with fried foods.

A number of countries have reported favorable initial results. In Morocco, for instance, officials announced doubled human consumption of fish flour in 1960, and expected increased consumption in 1961. Two plants now manufacture biscuits containing 15 percent fishflour-derived protein.

El Salvador's Instituto Tropical de Investigaciones Científicas reported fish flour added to native foods "markedly increased the rate of weight and height gains in children exhibiting various degrees of malnutrition and tended to increase their resistance to illness and intercurrent infection."

Certain U.S. organizations like AID and Food for Peace are interested in the flour's potential for helping alleviate world food deficiencies. Any U.S. program, or commercial production, however, has to have approval from the Food and Drug Administration. At the end of 1961, this U.S. agency still felt the flour to be adulterated and unfit for human consumption.

In the final analysis, the biggest hurdle for fish flour, both in the United States and around the world, will not be governmental approval, but consumer acceptance. And so far, most commercial production has foundered on lack of aggressive motion.

Cotton For Winter Wear Has "Arrived" in Sweden

"Winter Cotton"—now enjoying its second successful season in Sweden—has breached the European Continent at a northernmost point to prove U.S. cotton growers' contention that cotton knows no climate.

In 1960, the Foreign Agricultural Service, Cotton Council International, and the Swedish Textile Institute launched a joint market development program in Sweden on the use of cotton for fashionable winter clothes. The new cottons bore the label *Vinter Bomull*, or Winter Tree Wool.

The three promoting groups might well have felt the Swedish market a hard nut to crack. Swedish winters are long and cold—wool is the traditional winter fiber—and per capita consumption of cotton is less than half that of the United States.

Decisive factors, however, were Swedens' high per capita income (one of the world's top five), widespread central heating, and increased leisure time with a resultant demand for play and sports clothing.

In late 1959 a Swedish Cotton Information Office was set up and plans were laid for a special market development promotion in 1960.

Member mills of the Swedish Cotton Institute created new weaves, colors, and textures; ready-to-wear manufacturers designed new winter cotton lines. "Saturation" publicity hit all media during the peak of the 1960 winter season. *Vinter Bomull* had arrived.

The program is too new to show up decisively in U.S. cotton exports to Sweden. However, shipments in 1958 (low, partly because of a Swedish textile recession) stood at 62,000 bales, went to 102,000 in 1959, and to 115,000 in 1960. Sweden buys 80 to 90 percent of its cotton from the United States.

Winter cotton has now reached Finland and the United Kingdom, which began market development programs in 1961.

U.S. cotton growers may well feel *Vinter* has passed the acid test if it becomes popular not only in Sweden, but in Finland and the United Kingdom—none noted for mild winters.

The Trend Toward Freer Trade

The last 10 years have seen the world move slowly toward fewer trade restrictions. Why they were set up and the steps taken to eliminate them are described here.

By MARION A. EGGLETON
Trade Policy Division
Foreign Agricultural Service

If there was ever a time when the world's trade was free and unrestricted, mankind has long forgotten it. Today nontariff trade barriers are so common and so universally applied that they have been accepted, though reluctantly, as a way of doing business.

The Common Market's proposed agricultural policy, for example, would seem to favor continuation of external barriers to trade, especially for certain farm commodities that compete directly with domestic production. The extent to which this proposed policy is adopted and whether or not the other economic communities follow a similar policy will determine the level of future import controls in many important U.S. markets.

At the present time, however, the trend is in the opposite direction. Recent years have witnessed a gradual relaxation of the nontariff barriers which prevent the free flow of trade.

The peak of import controls came during the thirties and forties when the burdens of the Depression followed by the cost of financing World War II and subsequent reconstruction left many countries in a weakened financial condition. Expenses exceeded income, resulting in an adverse balance of payments. Faced with this situation these countries were forced by necessity to limit access to their import market.

The application of restrictions is easy. There is always justification for pursuing a protectionist policy to preserve monetary reserves and to safeguard the domestic industry from foreign competition. Yet once a restriction is in force, it becomes increasingly more difficult to relax it, and then remove it.

Human nature is adverse to change. When a specific trade policy is working smoothly, it is hard to visualize what it would be like without it. Even when a country's financial position is once again in the black, the fear often exists that a shift in controls will erase the progress that has been made. Also, domestic industries, accustomed to a controlled market, are sometimes unwilling to make the adjustment to a more competitive one.

Why Controls Exist

Normally, nontariff trade restrictions are maintained for three basic reasons: (1) Balance of payments difficulties, (2) economic development, and (3) protection of a domestic industry.

Restrictions arising from adverse balance of payments have probably been used most extensively because of the more or less general imbalance of trade which existed throughout the world after World War II. Conversely, as financial conditions have improved there has been the greatest relaxation of restrictions of this type.

The removal of restrictions maintained for economic development has been moving at a much slower pace. Countries retaining them are, for the most part, classified as underdeveloped areas. They have been hindered from relaxing restrictions by depressed world market prices for primary products, excessive import demands generated by their development programs, and the desire to protect young industries.

The import barriers which form the hard core are those that for one reason or another protect a given industry. By usual economic standards, this industry would be considered inefficient, but the government concerned feels that it is essential to the national security and well-being of the country to protect and support it regardless of cost.

These industry-protecting barriers are not directly linked to a country's monetary position, and consequently their removal is a longtime process. With the exception of these, however, the use of quantitative restrictions has tended to be related to the level of economic development within a given country. As progress is made a corresponding decline in import controls takes place. Yet even this is not a hard-and-fast rule, for there are always sporadic fluctuations in balance of payments situations that cause countries to resort to trade barriers.

GATT Policies

With the negotiation of the GATT (General Agreement on Tariffs and Trade) in 1947, the means were at hand to work toward eliminating the use of quantitative controls, with more reliance on import duties as a means of protection which would be subject to further negotiation. A basic provision of the Agreement was devoted to the general elimination of such barriers.

The "contracting parties," in agreement to this proviso, recognized that many of the members were not in a position to comply completely with this regulation. Therefore, exceptions to the rule were adopted to permit countries to impose trade restrictions for a limited period of time without violating their commitments under the GATT.

Of these exceptions, the most important are, first, those permitting the use of import quotas on agricultural products in conjunction with certain domestic agricultural programs; and second, those permitting the use of import restrictions to safeguard a country's financial position and balance of payments. Also allowed were restrictions maintained for economic development and national security, and those required by sanitary and quarantine regulations.

Less Discrimination

The GATT, in condoning certain quantitative restrictions, extended the principle of most-favored-nation treatment or nondiscrimination. But here again, it provided for an exception. A country could discriminate in applying import restrictions to the extent that it is permitted by the International Mone-

tary Fund to discriminate in the application of exchange controls.

During the last few years, the GATT contracting parties have made considerable progress in dismantling the structure of discriminatory restrictions built up when virtually all of the important currencies used in world trade, except the U.S. dollar, were inconvertible.

In October 1959, the International Monetary Fund ruled that "there is no longer any balance of payments justification for discrimination by members whose current receipts are largely in external convertible currencies." At the same time, the Fund recognized that such restrictions had been in effect for some time and that a reasonable period would be needed to eliminate them.

Relations With Fund

The Fund is an important instrument for settling problems relating to monetary reserves, balance of payments, and foreign exchange arrangements. Each of the GATT contracting parties is required to be either a member of the Fund or to sign a special exchange arrangement providing in part that the objectives of the GATT will not be frustrated by action by the country concerned. In addition, it makes available its lending resources to countries in temporary balance of payments difficulties, often enabling them to avoid intensifying their restrictions.

Furthermore, the Fund, in conjunction with the contracting parties, continues to review the restrictions in force and the justifications presented for them. Then annually, in the case of developed countries, and biannually, for underdeveloped countries, formal consultations are held with each of the countries maintaining restrictions for balance of payments reasons. At such time, problems are aired, and if a country's financial position has improved, then it is requested that the restrictions be eliminated. If a country's position has not improved, its government is asked to extend liberal treatment to all members and to take steps to remove the restrictions when they are no longer justified.

The GATT encourages bilateral settlement of all trading disputes, and its sessions provide opportunities for discussions between the countries concerned. These are completely informal and allow merely for each side to talk over its problem or justification, with the objective of arriving at more liberal treatment.

Thus efforts are continually being made to reduce the use of quantitative restrictions. In almost every major country in the world there has been some progress toward this goal. Today, with but few exceptions, industrial countries retain restrictions only on a limited range of products, mainly agricultural.

Historically, agriculture has been protected because of the determination of most countries to be at least partly self-sufficient in their food production. In many cases, production under uneconomic conditions requires heavy subsidization on the part of the government. Even so, it is sometimes considered essential for a country's longterm interests to support agricultural economies regardless of the cost.

To predict that trade barriers would be completely eliminated within 10 to 15 years would be far too optimistic. The trading nations of the world may never be entirely free of them. World economic and political conditions are continually changing, and whereas a country may be in a solvent position today, the situation could be completely reversed tomorrow. Still, the trend has been toward freer trade.

United States, Top Cigarette Exporter, Gains a Greater Share of World Trade

The United States last year supplied close to half the cigarettes entering Free World trade, at a value that may reach close to $100 million.

Five years ago the U.S. share was only about one-third. Yet it was in that year, 1957, that the United States became for the first time the world's leading cigarette exporter, surpassing the United Kingdom which traditionally has held the No. 1 position.

British cigarette exports began a downward trend in 1955. In 1960, U. S. shipments mounted to 46.5 million pounds and Britain's dropped to 28 million. Last year Britain's foreign sales improved slightly, with larger exports to the Arabian Peninsula and Europe, offsetting smaller shipments to Singapore and Malaya. U.S. sales, however, rose at a considerably faster rate.

Among the other major exporters last year were Belgium, Algeria, Switzerland, France, the Netherlands, Hong Kong, and the Federation of Rhodesia and Nyasaland. Of these, Belgium and the Netherlands have been increasing their shipments in recent years, while Algerian and Swiss exports have shown a decline. Important reexport centers are Singapore, North Borneo, Aden, and Gibraltar.

Various things account for the growing demand for U.S. cigarettes, among them the great number of Americans traveling abroad, which causes tobacco shops to carry a broader line of U.S. brands.

Larger incomes in countries depending on imports for quality cigarettes is another factor boosting U.S. sales; and so is the fast-growing preference for American-type cigarettes in countries where lack of capital and know-how prevent their manufacture

Over 100 countries around the world import U.S. cigarettes. The six Common Market countries take about one-fourth of total U.S. exports. Latin America also takes about one-fourth; and Gibraltar and the Middle Eastern countries combined, another fourth. Australia, Liberia, Malaya, Hong Kong, Switzerland, and Sweden are all growing markets for U.S. cigarettes and together they account for most of the remaining fourth.

All over the world the manufacture of cigarettes is trending upward The United States is still the leader but other important producers are Mainland China, the USSR, the United Kingdom, Japan, Western Germany, Brazil, Italy, France, and Poland.

Factory-made cigarettes now account for about 68 percent of total world consumption of tobacco products, and the share is expected to grow larger as incomes rise in underdeveloped areas.

The FAO Conference —A World Agricultural Forum

By RALPH W. PHILLIPS
International Organizations Division
Foreign Agricultural Service

Some 600 of the world's agricultural leaders gathered in Rome from October 30 to November 24, 1961, for the Eleventh Session of the Food and Agriculture Organization Conference. This conference, which is the governing body of FAO, meets every 2 years to enable member countries to exchange views on current problems, to approve the Program of Work and Budget for the coming biennium, and to take other legislative actions.

World Food Program

Among the many items on the agenda, the one that attracted most attention related to the setting up of a multilateral program of assistance to developing countries, based on the utilization of surplus foods. The World Food Program which emerged, on an experimental basis for 3 years, will utilize voluntary contributions of food, services (e.g., shipping), and funds, with a target figure of $100 million. The aim is to have one-third of the total in cash.

Attention will be given to meeting emergency food needs and emergencies inherent in chronic malnutrition (which could include establishment of food reserves), assisting in preschool and school feeding, and implementing pilot projects in which food aid can contribute to economic and social development.

This program, to be undertaken jointly by FAO and the United Nations (UN), in cooperation with other organizations when desirable, will be carried out under the guidance of a 20-country intergovernmental committee. Ten members—Argentina, Brazil, Canada, France, Ghana, India, Indonesia, Netherlands, the United Arab Republic, and the United States—were designated by the FAO Council immediately after the Conference; the others will be designated by the UN General Assembly or ECOSOC.

Procedures and arrangements will be approved by concurrent sessions of the FAO Council and the UN Economic and Social Council, in April 1962. Then, a pledging conference will be convened jointly by the Director-General of FAO and the Secretary-General of the UN.

A joint FAO/UN administrative unit located in Rome will handle the work. Projects undertaken, in response to requests from recipient countries, will be carried out in accord with the FAO principles of surplus disposal.

New Member Countries

Another notable feature of the FAO Conference was the election of a substantial number of new member and associate member countries.

The membership, which totaled 82 full members at the outset of the Eleventh Session, was increased to 99 by election of the following: Central African Republic, Chad, Congo (Brazzaville), Congo (Leopoldville), Dahomey, Gabon, Ivory Coast, Kuwait, Malagasy Republic, Mali, Mauritania, Niger, Rumania, Senegal, Sierra Leone, and Upper Volta; and by the return of Syria as a member following its separation from the U.A.R.

British Guiana, Jamaica, Mauritius, and Tanganyika were elected to associate membership, in addition to one territory already in this status, i.e., Rhodesia and Nyasaland. Jamaica and Tanganyika are to assume full membership when independent. This will bring the number of members to 101, with three still as associate members.

Education in Africa

Among the 16 new members and two new members-elect, 15 are in Africa. Hence, more than the usual amount of attention centered on African problems. A major development was a new project for education and training in Africa, to cost $825,000 over the next 2 years, which was approved as part of the Program of Work. It is designed to provide the developing countries with a limited number of agricultural education advisers, specialists on training in various fields of food and agriculture, and a cadre of agricultural educators who will cooperate with the International Labor Organization in manpower surveys and with UN Educational, Scientific, and Cultural Organization (UNESCO) in educational planning missions.

Program of Work and Budget

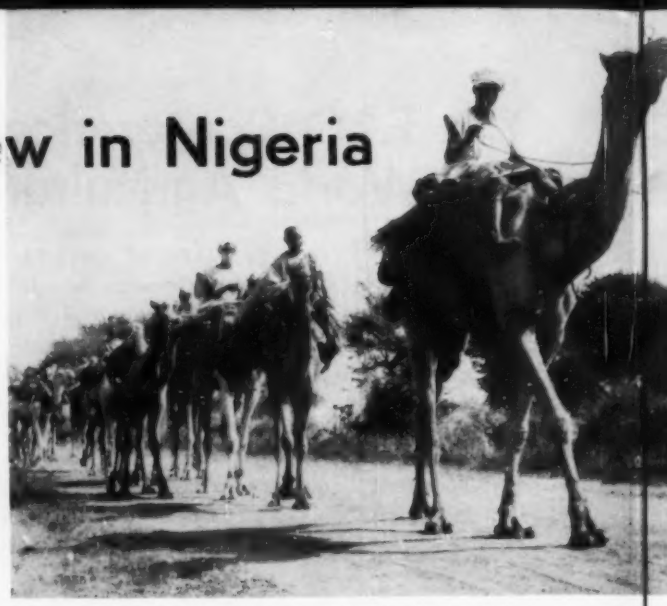
After reviewing the Program of Work proposed for 1962 and 1963, the Conference approved a Budget of $31,185,000 for the biennium. In addition to its regular program, FAO carried out projects under the Expanded Program of Technical Assistance (EPTA) in 1961 costing $9,649,175, and will probably have a slightly higher allocation in 1962. In addition, FAO has thus far undertaken to execute 65 UN Special Fund projects costing $46,456,800, which will be carried out over the next 2 to 4 or more years.

Reorientation of Activities

The regular program staff has substantial responsibility for planning, staffing, and supervising field programs carried out by FAO, using funds provided through EPTA, the Special Fund, UNICEF (for FAO/UNICEF jointly assisted projects), and through other channels. Recently, the need for assistance to newly emerging countries has increased. At the same time, the tendency has been to emphasize those activities financed from the regular budget that benefit only developing countries, at the expense of activities which benefit all members. Hence, some imbalances have developed within the overall program and these threaten to become more serious.

The Conference therefore requested the FAO Council, and its Program Committee, to consider this problem and to recommend steps aimed at maintaining a proper balance while providing essential assistance to the developing countries. In relation to the long-range development of FAO in the service of its member countries, this is probably one of the most important actions the Conference took.

Markets Old and New in Nigeria



Camel caravans are on the way out in Nigeria, but in the more remote ar they still supplement other means of transporting goods to the marke pl

Nigeria, which had its first birthday on October 1 last year, has about 35 million people to feed, clothe, and shelter. To carry out this task, the Nigerians have a number of tools which they inherited from the British. Foremost, probably, is their well-trained and able civil service; but equally important is a widespread network of marketing and trading facilities.

These facilities, well suited to the country's present stage of commercial advancement, have developed along two parallel lines—one based on European marketing methods, including large retail food and department stores, and the other based on the traditional African village markets and roadside stalls.

The customer uses whichever type of facility happens to be handiest to him at the time. In either type, he can buy a surprising variety of consumer products from almost any part of the world. The main difference is that the African markets have no fixed prices: the buyer arrives at a price through bargaining with the seller. In the department stores, however, prices are fixed.

Imported foodstuffs still reach Nigeria's retail merchants largely through the long-established import firms, mostly British in origin. Within the last few years, however, increased numbers of Nigerians have become active in the import business. In addition, Nigerians often work as partners with European or American firms interested in the West African market.

Once the imported foods enter Nigeria, the country's split-level marketing system takes over. Nigerian merchants—including the picturesque "mammy traders"—control a very large part of the internal retail trade. This is especially true of foodstuffs, both domestic and imported. Many of the old, established import firms are depending more and more on wholesale trade and have restricted their retail outlets to the large urban centers.

American and other imported foods are found being sold in wide variety both by the African stalls and by the modern supermarkets. One big supermarket in Lagos had on hand a wide range of imported foods when visited this year. Among the items were canned flour and soups, shortening, and instant coffee from England; canned soups and fruits, packaged flour, cake and pie crust mixes, and instant nonfat dry milk from the United States; canned salmon from Japan; canned "pure thick" cream from Denmark; canned cereal and powered whole milk from the Netherlands; and beer from Germany. There was much, much more.

That there is an expanding market in Nigeria for imported foodstuffs can, in part, be illustrated by the fact that imports of fresh, chilled, or frozen meat increased from $741,000 in 1959 to $1,028,000 in 1960; imports of wheat flour, from $7,393,000 to $8,830,000; and total food imports, from $58,370,000 to $66,953,000.

Authorities are concerned, however, by the increasing excess of imports over exports. This gap has resulted from heavy investments in economic development and the people's demand for a rapid increase in living standards.

This ship at rest in Lagos Lagoon, with the busy Apapa wharves at rear, may have brought imported foods to help satisfy the desire of the Nigerians for a more varied diet as their standard of living goes up. Lagos-Apapa harbor is one of the best in West Africa.

By JOHN R. WENMOHS
U.S. Agricultural Attaché
Lagos, Nigeria

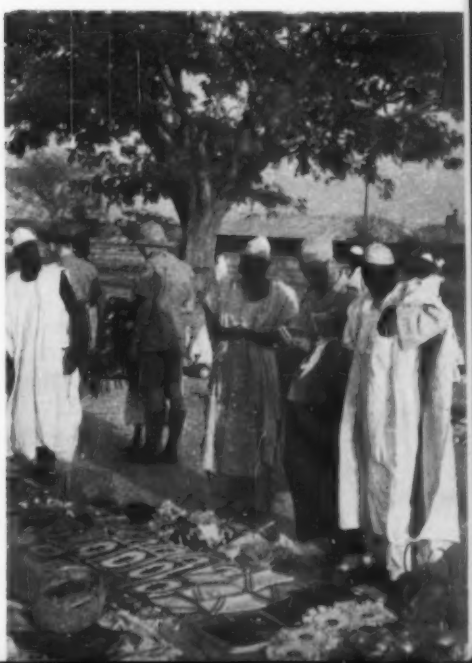
Below, African market in Ibadan, capital of Western Nigeria. Right, pr vision department of a big Lagos store sells goods from all over the wo

remote areas
marketplace.

At a wayside market, goods sold may include imported canned food, kola nuts (popular as a refreshment and stimulant), and boiled field corn on the cob which is eaten on the spot.

Also at wayside markets are curios and souvenirs, sold by Hausa traders.

Right, pro-
the world.



Finland Today

This tough northern country lying between East and West has built an economic boom out of farms, forests, and hard work.

By HARRY R. VARNEY
U.S. Agricultural Attaché
Stockholm, Sweden

Finland exported more dairy products in 1960 than ever before. Above, 20,000 Emmentaler cheeses stored in Helsinki warehouse. Right, modern milk factory in Lapland.

Finland is now entering the third year of an economic boom period: Agriculture has once more become almost self-sufficient, industrialization is growing, and total exports are at an alltime high.

The picture is not entirely rosy: In 1960 imports exceeded exports, as they have done before; prices are high, and agriculture is heavily subsidized. But to the Finns, whose genius for hard work has brought their country back from the near-ruin caused by war damage and reparations, both present and future seem hopeful.

Essentially, most of Finland's economic problems stem from lack of natural resources. The nation has only one major resource—the forests which cover 71 percent of the land—and little or no oil, coal, or other mineral resources. Only 13 percent of the land is arable, and much of this is thin soil, mostly clay and clay loam, needing constant drainage and fertilizer.

One-third of the country lies above the Arctic Circle and winters are long and hard. Many crops can be grown only in the southern part. Wheat, rye, barley, oats, potatoes, sugar beets, and some other crops reach their northern limits in Finland.

Ten percent of Finnish territory—including some of the best land—had to be handed over to the Soviet Union as war reparations. Jobs and homes then had to be found for the 420,000 Finns who refused to stay in the ceded area. Farms, already small, were further divided and new land was opened up to provide for 40,000 farm families needing resettlement.

Even during the war period the Finns had continued their struggle to find new cultivable land. Whole lakes were emptied, fens and bogs drained. One-third of Finland's present arable land area, or 2.2 million acres, was brought under cultivation in this way. Nevertheless, under the impact of resettlement of the refugees, the average farm holding dropped from 19.8 acres of arable land in 1941 down to 16.6 acres in 1950.

Most Finnish farms also include a considerably larger area of forested land, currently an average 56.8 acres. This preponderance of small forested farms, plus the rigorous climate, has led to a type of agriculture peculiarly Finnish: Livestock farming combined with forestry.

Livestock products account for about 85 percent of farm output—dairy products alone for over 50 percent. The principal breeds, native Finnish Brown and Ayrshire, are bred for yield. Though there were 41,000 fewer cows in 1956, milk production had risen to 3.3 million tons from 1.6 million in 1910. Milking machines, which now number 31,000, have begun to replace women at their traditional task of tending the cattle.

Cheese and butter are Finland's principal agricultural exports, though both must be heavily subsidized in order to be competitive. Exports of dairy products reached an alltime high in 1960.

Hog production has now returned to prewar levels and the Finnish effort

to produce a fast-growing, good bacon-type of hog has resulted in a demand for Finnish breeding stock abroad. Poultry and egg output are at record peaks, though egg exports are less than a third of prewar levels.

Because of wide variation in climate, crop yields range from 1,515 crop units per acre in the southwest to 715 units in northernmost Lapland. (1 crop unit = the feeding value of 1 pound of barley.) Oats are the most widely grown grain; barley, wheat, and rye are also important. Potatoes are grown everywhere and, in fact, some yields of potatoes grown per acre north of the Arctic Circle are as high as those grown anywhere else in the world. Sugar beet production is increasing.

However, despite overall agricultural gains, Finland has large deficits in food production. One-fifth of the bread grains and about four-fifths of the sugar are imported. Livestock production, despite near domestic self-sufficiency, relies in part on imported feeds. All cotton and tobacco must be imported as well as a large share of the fruit consumed, since aside from apples, the climate is too rigorous for successful fruit growing.

Cooperatives, which began in 1901 in Finland, play an important role in integrating Finland's widely scattered small farms. Most important co-ops are retail stores, dairies, and credit societies. Most farmers belong to more than one co-op, a fact which accounts for the large membership figure of 1.06 million in approximately 1,446 cooperatives. Credit societies, whose membership is larger than in any other country, provide the bulk of credit required by agriculture.

Highly Subsidized Farming

The difficulties of farming in Finland and the country's need to develop its domestic production are the basis for Finland's high degree of agricultural protection and complicated price and marketing policies. Foreign trade in farm products is regulated by tariffs, quantitative restrictions through licensing of imports, state monopoly of foreign trade in grains, and extensive export subsidies.

Legislation fixes guaranteed annual producer prices on wheat, rye, sugar beets, certain seeds, and wool. There is a guaranteed annual price on a specified quantity of domestic seed oil-which the margarine industry agrees to use. Direct subsidies to farming are also considerable.

Farming is difficult up near the Arctic Circle. This Finnish farm family is clearing new land and helping Finland achieve agricultural self-sufficiency.

The forests which make up so large a part of each farmer's holdings are responsible for the "extra" in his income that makes the small Finnish farm an economically viable unit.

Sixty-one percent of Finland's forests belong to individual farmers. The trees furnish the farms with wood for household use and income from timber sales. In the well-wooded central and eastern parts of Finland this income is, on an average, even bigger than the income from agriculture.

Voluntary cooperation of the farmers in forestry associations has been an important deterrent to the haphazard silvicultural practices common among small forest owners. Legislation also protects the forests from destructive cuttings and aims at continued regeneration and improvement.

Old and New Industries

Expansion of the wood and paper processing industry has been the focal point of Finnish industrialization. Wood and paper products have long been Finland's principal export and now account for 80 percent of the country's foreign trade. In 1960, exports of paper products were valued at $417.2 million and wood industry exports at $262.7 million.

A relatively new industry is metal working, which expanded during World War II to meet war needs. The industry was forced into further expansion to meet Soviet reparations, which had to be paid in products of shipbuilding and engineering industries. These products include tools, farm machinery, dairy plants, machines for the woodworking and paper industries, locomotives, ships, engines, motors, and cable products. Since the bulk of the raw materials for the metal-working industry must be imported, production costs are high.

Careful Trade Neutrality

Prior to Finland's independence from Russia at the time of World War I, most of Finland's trade was with Russia. Following independence, Finland began to build up strong trade relations with new markets in the West, notably the United Kingdom.

After World War II, Finland perforce returned to increased trade relations with the Soviet because of the necessity to pay reparations in the form of products of the shipbuilding and engineering industries. Once these

reparations were paid, Finland found itself with considerable investment in industries whose products were not competitive pricewise with those of Western producers—and, therefore, could not be sold to countries outside the Eastern Bloc. Also involved was that "payment" from the Bloc countries was in the form of raw materials needed by Finland, such as solid and liquid fuels, artificial fertilizers, grain, fodder, cotton, and sugar. These factors provided considerable justification in the Finnish view for continuance of the trade relationship.

However, Finland's trade with the Soviet Bloc at its height was never more than 30 percent of Finland's total foreign trade and now amounts to approximately one-fifth of the total.

In 1960, 83.8 percent of Finland's imports came from the United Kingdom, other EFTA countries, and EEC; 87.5 percent of Finland's exports went to these countries. Exports to EEC countries rose 37 percent over the year before, to EFTA countries by 32 percent, and to the United Kingdom alone by 25 percent.

The United Kingdom has long been the principal source of Finland's imports and market for its exports. In both 1959 and 1960, however, West Germany moved into first place as a source of Finnish imports; Britain was second, and the Soviet Union was third. For both years' exports from Finland, the United Kingdom continued first, with the Soviet Union second, and West Germany third. The United States ranked fifth both as source of imports and as market for Finnish exports.

The United States' principal exports to Finland—cotton and linters, fruits, and tobacco—formerly entered Finland largely under P.L. 480. Now, however, with Finland's improved economy, an increasing number of U.S. exports to Finland are dollar sales. Of the 30,000 bales of cotton sent Finland in 1960-61, 13,000 bales were under P.L. 480. Since 1949, the United States has been the principal source of Finland's tobacco leaf imports, a portion of which are under P.L. 480. Beginning in 1959, Finland established an import quota which permitted commercial imports of U.S. fruit for the first time; the quota was raised in 1961 and indications are that this trend will continue.

Because of this preponderance of trade with the Western nations—and with Finland's principal competitors outside the European Economic Community—Finland originally evinced cautious interest in EEC membership. When this proved impossible, negotiations began for association with EFTA. Finally in July 1961, a special relationship with EFTA was set up.

Finland's unique tie with EFTA permits Finland to retain its most-favored-nation relationship with the Soviet Union, even though other EFTA members had not recognized the validity of any previous agreements with the Soviet Union.

Finland is now "carefully watching" the outcome of Britain's decision to seek admission to the Common Market, which might well result in Finland's reappraisal of its own position.

Optimistic Future

Since early 1959, Finland has been enjoying a hard-earned economic "boom," which shows signs of continuing in 1962. The wood-processing industry—bellwether of the economy—Finnish shipyards, and the metal-working industry are working at near-capacity.

However, Finland requires new industry to maintain its rising standard of living and provide jobs for a growing population. For further industrialization, foreign capital is a must. So far, the World Bank has been the principal source of funds. The latest of 8 loans was for the expansion of 7 privately owned Finnish pulp and paper manufacturing firms.

Agriculturally, Finland is undergoing a development similar to that of other Scandinavian countries, where dairy output exceeds domestic demand and exports must be heavily subsidized. Agricultural leaders in Finland, therefore, believe the major action during the 1961-70 decade should be to get home markets reserved for domestic farm and food products to the fullest extent and improve storage facilities to stock seasonal surpluses. Increased domestic consumption of butter and cheese has not markedly reduced surpluses which Finland may find increasingly difficult to market.

Competition Grows Keener For Japan's Corn Market

The United States again led the field in corn exports to Japan in 1960-61, but coming up fast were Thailand and South Africa. Out of total Japanese corn imports of 1.708 million metric tons, the United States supplied 607,000 tons, Thailand 425,000, and South Africa 407,000.

Nine years earlier, the lineup was different. Japanese imports totaled only 102,000 tons: the United States supplied 76,000 tons, Thailand 1,000, and South Africa none. Then, 3 years later, South Africa jumped into the market with exports to Japan only 4,000 tons lower than U.S. exports.

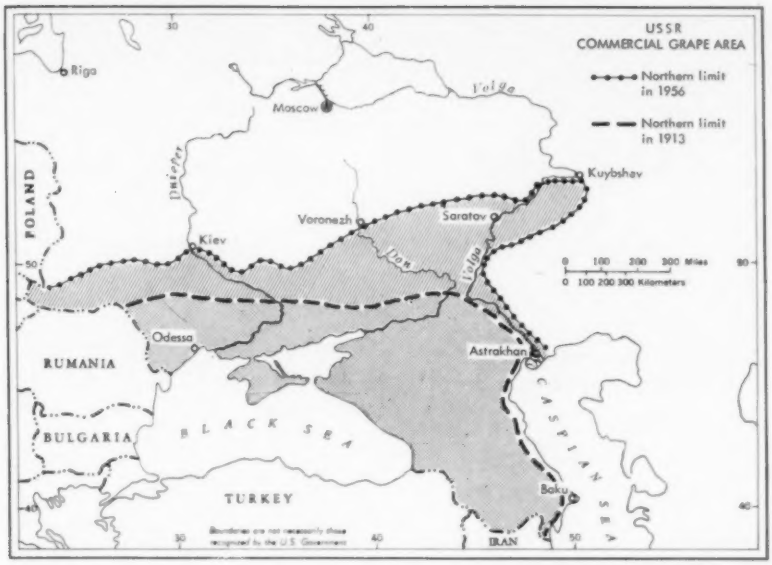
Since then, exports of all three have kept up a more or less steady rise. The percentage increase of Thailand and South Africa, however, has been so great that the U.S. share of the market has not kept pace with Japan's rapidly growing import needs.

Japan is No. 1 market—and target—for Thai and South African corn. In recent years Japan has taken 80 percent of Thailand's exports, and last year it took about 50 percent of South Africa's. Both nations are bending every effort to increase these exports. Both are stepping up corn production, improving quality, and modernizing marketing and transportation methods.

Thailand signed a trade pact with Japan in mid-1961 in which it agreed to improve corn quality and handling facilities. Thailand expects to up its exports to Japan to around 500,000 tons a year.

South Africa's corn exports in 1961-62 may reach 1.6 million tons, and the quantity going to Japan will probably exceed last year's level. South Africa has begun shipping corn from Durban to Japan by tanker, which has lowered shipping costs.

In 1960-61, Japan was the largest market in Asia for U.S. corn, fourth largest in the world. This year, if U.S. prices are competitive, the United States hopes to supply a substantial part of the 2 million tons of corn Japan is expected to take in 1961-62. The corn, as well as increased quantities of feed wheat and sorghum, is being absorbed by Japan's rapidly expanding livestock industry.



Grapes in the Soviet Union

By MARGARET MILLER
Regional Analysis Division
Economic Research Service

Soviet plans to quadruple grape production through increased yield and acreage during the current Seven-Year Plan, 1959-65, are off to a slow start.

In 1958, the yield per acre was 2.2 short tons; it fell to 2.0 in 1959,* and has not been reported for 1960. (Before the Russian Revolution, when 85 percent of the vineyards were owned by quite small landholders, average yield per acre for 1910-13 had been 2.1 tons.) Acreage went from 1.9 million in 1958 to 2.6 million in 1960, and production rose from 1.9 million short tons to 2.1 million.

The plan indicates that increased acreage is to come not only from further development of the traditional grape-growing regions in the south, but the opening up of new areas farther north in the European and Asiatic territory of the Soviet Union. The Soviets claim to have evolved new, hardier, frost-resisting grape varieties which are supposed to make this northern expansion possible.

The principal grape-growing areas have always been in the south: the Crimean region of the Ukraine; Moldavia (formerly Bessarabia); the north Caucasus area of the Russian Socialist Federative Soviet Republic; Transcaucasia (mainly in Georgia); and the central Asiatic Republics.

These areas suffered a great deal of devastation in both world wars. During the first war, about 38 percent of all vineyards were destroyed. The plants that survived produced only half their former yields. Production was brought back to 1.2 million tons by 1940, only to face an estimated 60 percent loss of vineyards during World War II.

New expansion followed, and according to Soviet figures, the area in vineyards more than doubled between 1955 and 1960.

In recent years, experiment stations, especially in the southern Ukraine, the northern Caucasus and Moldavia, have been concentrating on fruit research and grape breeding. Particular emphasis has been put on table grapes which are scarce in the Soviet Union.

Most of the USSR's grape production goes into wine. A number of new wine-making combines set up in the 1930's gave impetus to the wine industry and in 1960, a Russian source has estimated, about 90 percent of total grape production went into wine. Commercial production of grape wine increased from 125 million gallons in 1955 to 205 million in 1960.

Moldavia is the largest and oldest grape-growing and wine-making region in the country. About a fifth of Soviet vineyards are concentrated here and viticulture is an important source of income for collective farms. New vineyards are planned for an additional 445,000 acres. These will be principally in the form of terraces which will permit contour cultivation of slopeland which has lain idle. This program, however, hinges on the availability of special technical equipment—bulldozers, grubbers, and powerful tractors—the supply of which has not heretofore been adequate.

Because of the emphasis the Soviet Union is placing on viticulture, it is likely that grape production may gain appreciably in the next few years. However, the current Seven-Year Plan goal appears overly optimistic. The productivity of the new vineyards in the north—upon which any really sizable increase must at least in part depend—seems problematical, because of the short growing season. Even the very important grape-growing region of the southern Crimea is in the latitude of Rochester, Minnesota.

Grape production and vineyard area in the Soviet Union

Region	Area[1]	
	1955	1960
	1,000 acres	*1,000 acres*
Moldavian SSR	328	544
Ukrainian SSR	241	981
Georgian SSR	163	210
Russian SFSR	125	435
Uzbek SSR	80	106
Azerbaidzhan SSR	67	138
Armenian SSR	49	77
Tadjik SSR	22	32
Turkmen SSR	16	20
Other	59	42
Total	1,150	2,585
	Production	
	1955	1960
	1,000 tons	*1,000 tons*
Moldavian SSR	269	558
Ukrainian SSR	191	466
Georgian SSR	331	272
Russian SFSR	208	247
Uzbek SSR	75	205
Azerbaidzhan SSR	77	100
Armenian SSR	98	101
Tadjik SSR	16	48
Turkmen SSR	9	26
Other	20	38
Total	1,294	2,061

[1] Bearing and nonbearing.

Sources: *Razvitie i Razmeshchenie Zemledeliyar P.M. Zemskii*, Moscow, 1959. *Narodnoe Khozyaistvo SSSR v 1960 godu*. Moscow, 1961.

*Yields are for bearing vines only. In 1959, out of a total of 2,355,000 acres, 937,000 were bearing.

The spillway of Salazar Dam.

Portugal Plans To Irrigate More Land

By FRANK W. EHMAN
U.S. Agricultural Attaché,
Lisbon, Portugal

Seen from a lookout point just south of the town of Odemira in southwest Portugal, the level land stretches nearly as far as the eye can see—west to the Atlantic coast and north about 25 miles to the town of Vila Nova de Milfontes, at the mouth of the Mira River.

"This fertile soil produces only one wheat crop every 5 years," declares a Ministry of Agriculture agronomist, "but, one day, at least 30,000 acres of this land will turn into a perpetual green of citrus, vegetables, and cereals grown under irrigation." The change will be caused by the Mira Reclamation Scheme, plans for which are already completely drawn up, including a new dam, the Santa Clara, to be built on the upper Mira River.

This experience of seeing great expanses of good soil waiting for water and of visiting the sites of future dams was repeated many times on a recent 1,000-mile inspection trip through the southern Provinces of Algarve and Alentejo as a guest of the Portuguese Hydraulic Service. Such graphic plans for the future, plus the many schemes already finished, dramatize the important part that irrigation has played and will play in the future for improving the country's agriculture.

In total area, Portugal is only 343,750 square miles, about the size of Indiana. Of this, about one-half is being cultivated and, aside from the forest land, only one-fifth of the total area is actually producing food and fiber for Portugal's 9.1 million people. The country demands an intensive agriculture and the introduction of additional acreage into production. Hence, irrigation and reforestation have come to play very important parts in the country's development plans.

Though they stress irrigation, plans also call for extension of the already great areas of forest in Portugal. Often, visitors are astonished to learn that silviculture is an ancient and honored art in Portugal, dating back to the Visigoth Code in the 7th century.

Most of Portugal was at one time covered with trees—oak, pine, and eucalyptus—which have been used for fuel and housing, shipbuilding, erosion control, and the production of naval stores (Portugal is the world's No. 2 exporter), paper, and wood exports. In 1957, 6.2 million acres were in forest. An additional 3.7 million acres is scheduled for reforestation.

Unlike forestry, irrigation is relatively new in Portugal, but the need for it has always been there. Average rainfall varies from about 20 inches in the far south to roughly twice that in the northern mountain areas. Most of it falls between November and March. There is practically no rain in the south during the summer months—and only occasional light rains in the north. The large areas of potentially productive land not now being cultivated attest to the seriousness of the water problem.

It is only in the last 25 years that the Portuguese have tackled the irrigation problem seriously. The government's General Irrigation Plan of 1937 called for the construction of facilities

for the irrigation of 261,922 acres in 20 different schemes located south of the Tagus River. By 1958, this work, plus an additional 36,639 acres in three new projects, was completed.

One of Portugal's largest irrigation schemes is the Sado Valley one. At the heart of this project are two dams, the Salazar and the Trigo de Morias, completed in 1956 and together able to hold water enough to irrigate 200,000 acres of land.

A good share of the water for this land is supplied by 10 earth and concrete dams which together are capable of backing more than 18.2 billion gallons of water. These dams, with their numerous distribution canals, are essentially irrigation dams but also provide some hydroelectric power. Other larger dams in the north are used mainly for the purpose of power.

In addition to the 298,554 acres being irrigated under government schemes, there are 689,832 acres operating under private development, including wells, springs, natural flooding, and field dams.

No new land has been brought under irrigation since 1958 but authorities state that there is an additional million acres still to be irrigated. Construction plans have already been finished for 61,774 acres and studies covering another 475,000 acres are now being carried on.

An additional 494,193 acres of irrigable land remain for future development. Once all this is completed, Portugal will have an estimated 2.1 million acres under irrigation, 1.3 million of which are in government schemes, with the remainder being privately operated.

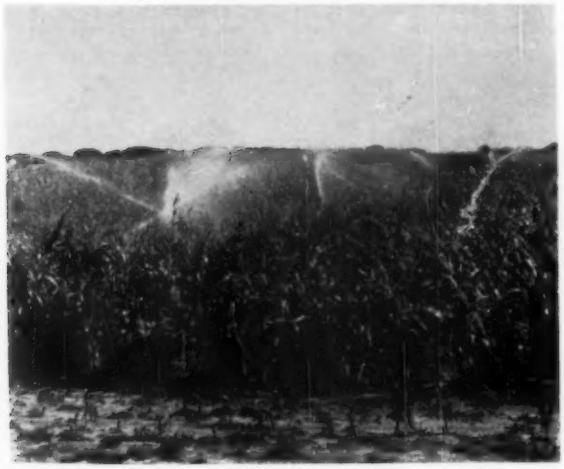
Pressure to get on with the work stems not only from the country's need for increased production but also from the many beneficial outgrowths that can come from the use of more water in agriculture. Already a whole new industry, producing tomato puree for export, has sprung up largely as a result of irrigation. Others, such as sweetcorn for canning, peppers for stuffed olives, popcorn, new varieties of table beans, and seed from grasses and clovers, are being discussed.

New acreages under irrigation would make possible specialization of meat and milk production in the livestock industry. Reliable yields of grass, clover, and feed grains are a prerequisite. Perhaps equally important are the probabilities of land reform, increased employment, increased production per man, and the higher standard of rural living that would result from the first three.

Problems currently holding up further progress in irrigation include the need for adequate funds and enabling legislation. These, together with the expressed need of gearing irrigation to land reform, require time to solve. But there is complete agreement about one thing, and that is the need for more irrigation facilities in Portugal.

Attaché Ehman, left, and the chief engineer of Portugal's Hydraulic Service look over part of the 40,000 acres irrigated by the Montargil Dam-Marahao River system.

Below, a sprinkler system brings well water to corn at the Pegoes Experiment Station. Right, cows graze on irrigated pasture at Pegoes.



Puree—Portugal's New Food Industry

Many of the tomatoes being unloaded here are destined to go into puree. By stressing quality, Portugal hopes for a bigger share in the export market.

Tomato puree is Portugal's newest and most rapidly growing agricultural industry. The 749,000 cases of puree produced in 1960 were three times the 1957 figure, and production is expected to double again by the end of this year. Almost all of it is exported.

A major stimulus has been the booming processed foods industry in the United Kingdom, Portugal's principal market, which is absorbing more and more puree and other forms of processed tomatoes.

To meet the increased demand for processed tomatoes, there are now 10 canneries in Portugal. Most of them are located in, or near, the flat, fertile area about 30 to 60 miles from Lisbon where most of Portugal's tomatoes are grown. Out of the 10,000 acres devoted to tomato growing in this area, 5,000 acres produce for canneries.

In 1939, only 250 acres were in tomatoes for processing. It was not until 1947 that the big drive began to encourage their growth. Prior to this time, there had been little or no domestic, or export, trade. In fact, until 1940, annual exports of tomato products averaged only about 400 tons in the form of paste.

The first step was to limit the excessive, uneconomic number of varieties then being grown. Studies were initiated to determine varieties rated best in high production, color, smooth skin, small heart, solid pulp, heavy sugar yield, and low acidity.

Improved cultural practices were widely encouraged. New and better seed, fertilizer, spraying, and irrigation have now raised per acre yields 50 percent above those of a few years ago. Many growers attain yields of 16 tons per acre; a few get as high as 20 to 28 tons per acre. Extension work has also helped reduce production costs.

The Portuguese feel their country's combination of soil, climate, and labor availability makes the raising and processing of tomatoes a "natural." They plan to market only first-quality products in order to compete successfully with Italy and other leading puree producers. Italy, the world's leading exporter of puree, shipped out 7.4 million cases in 1960, primarily to the United Kingdom and West Germany. These two, along with Norway, Denmark, and Belgium, are also major markets for Portuguese puree.

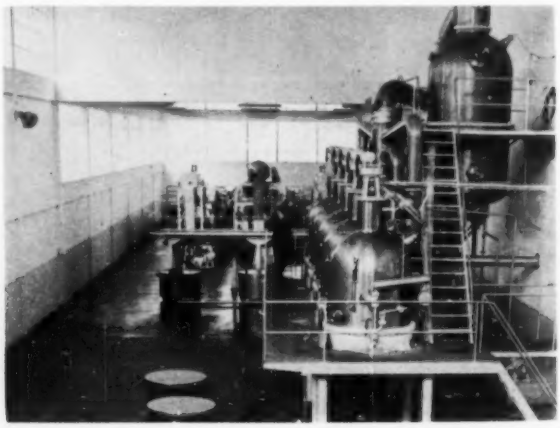
Europe is not a major market for the United States, the world's largest producer of puree and second-largest exporter. Most U.S. exports go to Canada, Latin America, and Japan.

The United States, also an importer of puree, brought in 416,000 cases of paste and puree in 1960-61. It was in this year, too, that Portugal showed up for the first time as one of the United States' sources of supply, thus providing another indication of the infant industry's progress.

—FRANK W. EHMAN

This modern tomato processing plant is one of 10 in Portugal now aiming at double puree output in 1962.

This condenser is part of the new tomato processing equipment now being used in many Portuguese plants.



U.S. Ships Ginseng Root to Hong Kong

Each year, $2 million worth of ginseng, a small plant whose generic name means panacea, is sent from the United States to Hong Kong. This accounts for more than half of Hong Kong's imports of the product, a commodity that makes up about 3 percent of the colony's agricultural imports.

Though sometimes literally worth its weight in gold, ginseng is a most inauspicious-looking plant. It grows about a foot tall. Its narrow stem is surrounded by compound leaves in clumps of five and topped first by a bell-shaped cluster of green flowers and then by scarlet berries. The yellowish root of ginseng is forked, bearing a fancied resemblance to a man's body which gave rise to its Chinese name, jintsang—likeness of man.

In many Oriental countries, parts of the ginseng plant, particularly the roots and leaves, are said to cure almost everything. They are especially prescribed for the old and the tired. One 17th century writer reported that "He that hath this root in his mouth will hold out at labor as long again as he that hath it not." In the Western world, however, ginseng has met the fate of most curealls: its medicinal powers have been repudiated and any good it might do is attributed to its psychological effect on the user.

In 1716 the American species of ginseng, only slightly different from the one native to China, was discovered near Montreal, Canada. The French began exporting it to China almost immediately. Soon afterward, it was found in the American colonies and early in the 18th century the first American consignment left for China.

Supplies of wild ginseng were nearly exhausted by the middle of the 19th century and many efforts were made to cultivate it in the United States. Finally, in 1885, George Stanton of Apulia, N. Y., succeeded in growing it, first in a plot he prepared in the woods, and then in a sheltered area of his garden. Today ginseng is grown on a small scale on farms scattered about the eastern half of the United States, and nearly all of the crop is exported, mainly to Hong Kong.

Thailand's Expanding Kenaf Crop Supplies Cash for Farmers and Fiber for Factories

Kenaf is one of the world's oldest fibers—traces of it are said to have been detected in fabrics from ancient Egyptian tombs. Through the centuries, farmers have continued to grow it, chiefly in India, which uses it as a jute supplement in making gunnysacks and burlap; but in most other countries, it has stubbornly remained an "experimental" crop.

In the last few years, however, this situation has begun to change. Kenaf is finding a useful place in the economy of certain developing countries whose way of life is still largely agricultural. These countries urgently need cash crops for their farmers, gunnysacks to get those crops to market, and local industries to lift the national income. Where an abundance of farm labor can keep down the cost of extracting the kenaf fiber, it can well pay a country to encourage this crop and produce part of its own gunnysacks, rather than spend foreign exchange to import all its supply.

One country that is having considerable success along these lines is Thailand. Here, kenaf production has risen sharply in the past 10 years—from 44 million pounds in 1951 to nearly 220 million in 1960. One of the objectives of this expansion has been to support a local gunnysack industry, so Thailand can supplement and eventually replace the heavy imports it now needs for packing its major export commodities such as rice and corn. Other aims have been to help diversify its traditionally rice-dominated agriculture, improve its farmers' incomes, and add to the number of exportable crops. Kenaf is one of the commodities the government is promoting for these latter purposes, as are corn, cassava, sugar, castorbeans, and peanuts.

Thailand's kenaf program has been so successful that gunnysack mills in the country cannot utilize more than a small part of the kenaf crop. In 1960 the three Thai mills together manufactured only 5.9 million of the 27 million gunnysacks used. The rest had to be imported—new sacks mostly from India, used sacks from Singapore and Hong Kong. Domestic consumption accounted for only 24 million pounds of the total kenaf and jute supply; there was a large exportable surplus.

The world jute market was hungry for fiber supplies in 1960, after the short jute crop of 1959 and the extremely short and tardy 1960 harvests in India and Pakistan (the major producing countries). Thailand's exports —mostly kenaf—jumped from 82.2 million pounds in 1959 to 136.2 million. In the first 6 months of 1961 they were still heavier, totaling 166.2 million pounds, of which the United Kingdom took 80 million, Japan 41 million, and India 10.6 million. The world's 1961 jute crop, however, was expected to hit a record, and the inevitable price decline will no doubt remove Thai Kenaf's export advantage.

Thailand's problem of inadequate mill capacity may be eased next year, when a new mill is added to the present three. Contracts were signed last spring calling for delivery in mid-1962 of equipment for a factory with 200 looms and an estimated production capacity of 15 million gunnysacks a year at full operation. The new mill is to be partly financed by a loan equivalent to $736,000 from the proceeds of U.S. sales to Thailand under P.L. 480.

Perhaps owing to high manufacturing costs, however, even the present mills are not operating to capacity. If they were, they could produce 10 million gunnysacks a year instead of 5.9 million. This, plus the 15 million expected from the new mill, would come much closer to supplying Thailand's needs for agricultural packing. With cost the main difficulty, Thai experts point out the need for stressing increased productivity on the farm coupled with increased efficiency in the factory, so that the domestic industry can supply gunnysacks competitive in price with those the country must now import, and also so that Thailand's kenaf surplus will be competitive on world markets.

This article is based in large part on material supplied by Joseph C. Dodson, U.S. Agricultural Attaché, Bangkok, Thailand.

Indian Women Taught New Ways To Use Wheat

Right, Miss Thangman E. Philip, vice principal of a catering college near Bombay, explains to U.S. marketing specialists the working of the college's new oven for making leavened bread, a product known only in the cities.

Left, Bombay housewives learn how to make an Indian-type doughnut from wheat flour. This is part of a nutrition program sponsored by Wheat Associates, a U.S. market development organization.

Bigger World Coffee Crop Forecast With Exports at 45 Million Bags

World coffee production for 1961-62 is likely to reach 7.5 million bags, according to the latest estimate by the Foreign Agricultural Service. This would represent an increase of about 15 percent over the previous year's output.

The Central American coffee countries are expecting a record production —10 million bags, 11 percent above 1960-61. Conditions were particularly favorable in El Salvador and Guatemala, where crops are approaching peak levels.

The South American coffee crop is estimated at 48.3 million bags, with 38.6 million exportable. This would be 21 percent above 1960-61. In Brazil, the world's largest coffee-producing country, a 38-million-bag crop is expected, and indications are that it will be of better quality than in 1960-61.

Political disturbances held back Africa's production. This was particularly true in Angola, where the trees were heavily loaded with berries but the picking did not take place as scheduled. Ivory Coast's production is down slightly because of dry weather. However, other countries—notably Cameroun, Ruanda-Urundi, and Uganda—have registered increases.

In the coffee-growing countries of Asia and Oceania, the forecast is for 3.3 million bags, slightly below 1960-61. India's crop suffered from adverse weather conditions. Indonesia's remained about the same, and only a slight rise is expected for the Philippines. In Papua and New Guinea, production mounted rapidly as it has been doing for the last 3 years.

World trade in coffee is increasing slowly and will probably be around 45 million bags for the 1961-62 year. Even so, the 75-million-bag output would mean that an additional 14 million bags will be added to already burdensome world coffee stocks.

Food Aid

(Continued from page 4)

I am optimistic enough to believe that, if necessary, programs could be devised to guide withdrawal of sufficient farm resources from production to balance our output with prospective outlets (excluding our food aid exports). Consequently, I believe that we do have other alternatives if we cannot use food and fiber effectively in integrated international aid programs. But I am more of an optimist on the prospect of gradually converting food for economic development into commercial markets for farm products.

Therefore, I look upon effective food aid as a part of a long-term market development program. And I am deeply impressed with our responsibility as a part of the Free World community. We must do our part to remove the food barrier to economic progress.

This article was adapted from the talk by Dr. Johnson at USDA's Outlook Conference in Washington, in November 1961.

TRADING POST

Profitable Year Forecast For U.S. Dry Pea Exports

This year may turn out to be a record one for U.S. exporters of dry peas, in view of the short 1961 crops in the other major producing countries. French pea and lentil crops last year dropped 40 percent over 1960. In Morocco production was down 56 percent, in the Netherlands 30 percent, and in the United Kingdom 37 percent.

France, which normally buys from Morocco, will have to seek another source. Also, the United Kingdom, the world's largest market for dry peas, will be looking for larger supplies from the United States because of the Moroccan and Dutch shortages.

Thailand Still Growing As a U.S. Tobacco Market

If present consumption trends continue, Thailand will need an additional 400,000 to 500,000 pounds of U.S. tobacco annually.

The second largest market in Asia for U.S. leaf, Thailand has more than doubled its imports from the United States in the last decade. (For 1961 they are estimated at over 12 million pounds.) Chief reason for this is the growing popularity of cigarettes blended with U.S. tobacco. Also, more Thais are smoking cigarettes than previously.

Record World Hog Slaughter Expected

Ever since World War II, except for a few fluctuations, world hog slaughter has been mounting. Last year the number of hogs slaughtered was 23 percent higher than the average for 1951-54, and the forecast for this year indicates a further rise of 5 percent.

Most of this increase is expected in Europe, where hog numbers are at a record high. To what extent this increase will curtail U.S. shipments of pork and lard to that area is hard to tell, but it is unlikely that the United States will entirely regain its big share of the United Kingdom's lard market. Last year Britain bought about 30 percent of its lard from Western Europe, and it might very well do so again if U.S. lard prices fail to register the expected drop.

Ghana Signs To Sell Cocoa to the USSR

Late last year Ghana and the USSR signed their first longterm trade agreement, whereby the Soviet Union will purchase 35,000 tons of cocoa beans from Ghana the first year, increasing its purchases to 60,000 tons a year or above by the end of the 5-year period.

Ghana will also supply the Soviets with peanuts, palm oil, and rubber. The report did not specify what, if anything, Ghana would buy from the USSR, but mention was made of an economic and technical assistance agreement signed at the same time.

Big Three in Hides And Skins Up Sales

Exports of cattle hides and calf skins by the world's three leading shippers, Argentina, the United States, and Australia, increased last year and are expected to show a further rise in 1962. The Australian increase came after a 2-year decline.

Argentina is the No. 1 exporter of cattle hides, 7.2 million hides in 1960 and somewhat more in 1961. The United States is a close second, 6.9 million in 1960 and also up in 1961. Australia, with exports of between 1 and 2 million skins a year, is third.

The United States is by far the leading calf skin exporter and may pull ahead of Argentina as a cattle hide exporter also in a few years.

Japan is the United States' largest market for cattle hides and Canada buys the most calf skins.

More Greek Cotton Going To the Communist Bloc

Greece, during the 1960-61 cotton marketing season, shipped 47 percent of its cotton exports to Communist Bloc countries, compared with 25 percent the previous year and only 6 percent in 1955-56.

Yugoslavia was the leading buyer—32,000 bales—followed by the Soviet Union, which took 18,000. The two largest non-Communist customers were France and Italy; each bought 12,000 bales, less than the year before.

Greek cotton production is mounting steadily. Latest estimates place the 1961-62 crop at a record 386,000 bales, or 42 percent above the average annual output of the past 5 seasons.

New Portuguese Ships To Aid Mozambique's Citrus Exports

Mozambique's shipping problem with its agricultural exports should be considerably eased early this spring when Portugal's Companhia Nacional de Navegação adds its second ship to the African run. The largest share of Mozambique's trade—both export and import—is with Portugal.

These new 20,000-ton passenger vessels are specially equipped with refrigerated space to carry Mozambique's agricultural exports, particularly its citrus. Up to now, citrus from its Sul do Save region has been exported through the South African Citrus Board, whose efforts to accommodate this fruit have not always succeeded.

Pakistan's Jute Exports Down From Previous Year

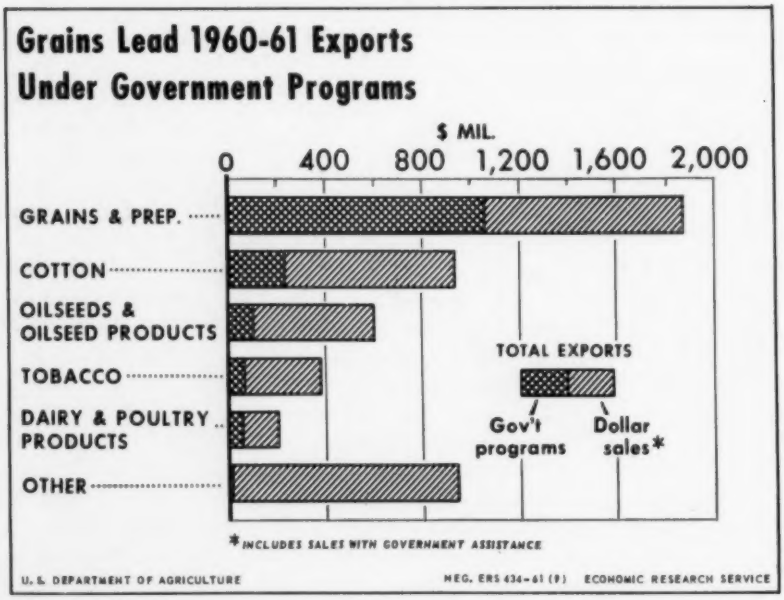
Pakistan, the world's largest exporter of raw jute, shipped only 1,196 million pounds in fiscal 1961 compared to 1,887 million a year earlier. Sales were down to all countries except Czechoslovakia and Egypt, which increased their buying. To both the United States and the Soviet Union they decreased 71 percent.

Pakistan's 1960 crop was poor for various reasons including bad weather. However, world jute production for 1961 is estimated at 5,064 million pounds, a 39-percent gain over 1960. Pakistan's crop accounts for a good share of this increase, for its 1961 jute acreage was not restricted.

UNIVERSITY MICROFILMS, INC
313 N FIRST ST
ANN ARBOR MICH
5-22-59
357

UNITED STAT
GOVERNMENT PRINTING OFFICE
DIVISION OF PUBLIC DOCUMENTS
WASHINGTON 25, D. C.

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, $300
(GPO)

If you do not desire to continue receiving this publication, please CHECK HERE ☐; tear off this label and return it to the above address. Your name will then be promptly removed from the appropriate mailing list.